The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lieutenant Governor

MARYLOU SUDDERS
Secretary

MONICA BHAREL, MD, MPH
Commissioner

Tel: 617-624-6000
www.mass.gov/dph

March 10, 2016

Steven T. James
House Clerk
State House Room 145
Boston, MA 02133

William F. Welch
Senate Clerk
State House Room 335
Boston, MA 02133

Dear Mr. Clerk,

Pursuant to Sections 25L and 25N of Chapter 111 of the Massachusetts General Laws, please find enclosed a report from the Department of Public Health entitled the *Massachusetts Health Care Workforce Center Annual Report.*

Sincerely,

Monica Bharel, MD, MPH
Commissioner
Department of Public Health

Charles D. Baker
Governor

Karyn Polito
Lieutenant Governor

Marylou Sudders
Secretary

Monica Bharel, MD, MPH
Commissioner

Massachusetts Health Care Workforce Center Annual Report

March 2016

Massachusetts Department of Public Health

Legislative Mandate

The following report is hereby issued pursuant to Section 25L and 25N of Chapter 111 of the Massachusetts General Laws as follows:

Chapter 111 M.G.L, Section 25L

(a)There shall be in the department a health care workforce center to improve access to health and behavioral, substance use disorder and mental health care services. The center, in consultation with the health care workforce advisory council established by section 25M and the secretary of labor and workforce development, shall: (1) coordinate the department's health care workforce activities with other state agencies and public and private entities involved in health care workforce training, recruitment and retention, including with the activities of the Health Care Workforce Transformation Fund; (2) monitor trends in access to primary care providers, and nurse practitioners and physician assistants practicing as primary care providers, behavioral, substance use disorder and mental health providers, and other physician and nursing providers, through activities including (i) reviewing existing data and collection of new data as needed to assess the capacity of the health care and behavioral, substance use disorder and mental health care workforce to serve patients, including patients with disabilities whose disabilities may include but are not limited to intellectual and developmental disabilities, including patient access and regional disparities in access to physicians, nurses, physician assistants, and behavioral, substance use disorder and mental health care professionals and to examine physician, nursing and physician assistant, behavioral, substance use disorder and mental health professionals' satisfaction; (ii) reviewing existing laws, regulations, policies, contracting or reimbursement practices, and other factors that influence recruitment and retention of physicians, nurses, physician assistants, behavioral, substance use disorder and mental health professionals; (iii) projecting the ability of the workforce to meet the needs of patients over time; (iv) identifying strategies currently being employed to address workforce needs, shortages, recruitment and retention; (v) studying the capacity of public and private medical, nursing, physician assistant, behavioral, substance use disorder and mental health professional schools in the commonwealth to expand the supply of primary care physicians and nurse practitioners and physician assistants practicing as primary care providers and licensed behavioral, substance use disorder and mental health professionals; (3) establish criteria to identify underserved areas in the commonwealth for administering the loan repayment program established under section 25N and for determining statewide target areas for health care provider placement based on the level of access; and (4) address health care workforce shortages through the following activities, including: (i) coordinating state and federal loan repayment and incentive programs for health care providers; (ii) providing assistance and support to communities, physician groups, community health centers and community hospitals in developing cost-effective and comprehensive recruitment initiatives; (iii) maximizing all sources of public and private funds for recruitment initiatives; (iv) designing pilot programs and making regulatory and legislative proposals to address workforce needs, shortages, recruitment and retention; and (v) making short-term and long-term programmatic and policy recommendations to improve workforce performance, address identified workforce shortages and recruit and retain physicians, nurses, physician assistants and behavioral, substance use disorder and mental health professionals.
(b) The center shall maintain ongoing communication and coordination with the health

disparities council, established by section 16O of chapter 6A.
(c) The center shall annually submit a report, not later than March 1, to the governor, the health disparities council, established by section 16O of chapter 6A; and the general court, by filing the same with the clerk of the house of representatives, the clerk of the senate, the joint committee on labor and workforce development, the joint committee on health care financing, and the joint committee on public health. The report shall include: (1) data on patient access and regional disparities in access to physicians, by specialty and sub-specialty, and nurses, physician assistants, behavioral, substance use disorder and mental health professionals; (2) data on factors influencing recruitment and retention of physicians, nurses, physician assistants, and behavioral, substance use disorder and mental health professionals; (3) short and long-term projections of physician, nurse, physician assistant and behavioral, substance use disorder and mental health professionals supply and demand; (4) strategies being employed by the council or other entities to address workforce needs, shortages, recruitment and retention; (5) recommendations for designing, implementing and improving programs or policies to address workforce needs, shortages, recruitment and retention; and (6) proposals for statutory or regulatory changes to address workforce needs, shortages, recruitment and retention.

Chapter 111 M.G.L, Section 25N

(a)There shall be a health care workforce loan repayment program, administered by the health care workforce center established by section 25L. The program shall provide repayment assistance for graduate and medical school loans to participants who: (1) are graduates of medical, nursing, or physician assistant schools or accredited graduate schools; (2) specialize in family health or medicine, internal medicine, pediatrics, obstetrics/gynecology, psychiatry, behavioral health, mental health or substance use disorder treatment; (3) demonstrate competency in health information technology, at least equivalent to federal meaningful use standards as set forth in 45 C.F.R. Part 170, including use of electronic medical records, computerized physician order entry and e-prescribing; and (4) meet other eligibility criteria, including service requirements, established by the board.
Each recipient shall be required to enter into a contract with the commonwealth which shall obligate the recipient to perform a term of service of not less than 2 years in medically underserved areas as determined by the center.
(b) The center shall promulgate regulations for the administration and enforcement of this section which shall include penalties and repayment procedures if a participant fails to comply with the service contract.
The center shall, in consultation with the health care workforce advisory council and the public health council, establish criteria to identify medically underserved areas within the commonwealth. These criteria shall consist of quantifiable measures, which may include the availability of primary care medical services or behavioral, substance use disorder and mental health services within reasonable traveling distance, poverty levels and disparities in health care access or health outcomes.
(c) The center shall evaluate the program annually, including exit interviews of participants to determine their post-program service plans and to solicit program improvement recommendations.
(d) The center shall file an annual report, not later than July 1, with the governor, the clerks of the House of Representatives and the senate, the house and senate committees on ways and

means, the joint committee on health care financing, the joint committee on mental health and substance abuse and the joint committee on public health. The report shall include annual data and historical trends of: (1) the number of applicants, the number accepted and the number of participants by race, gender, medical, nursing, physician assistant, behavioral health, substance use, and mental health specialty, graduate, physician assistant, medical or nursing school, residence prior to graduate, medical, nursing, or physician assistant school and where they plan to practice after program completion; (2) the service placement locations and length of service commitments by participants; (3) the number of participants who fail to fulfill the program requirements and the reason for the failures; (4) the number of former participants who continue to serve in underserved areas; and (5) program expenditures.

Executive Summary

The mission of the Health Care Workforce Center (the Center), established by Chapter 305 of the Acts of 2008 and expanded by Chapter 224 of the Acts of 2012, is to improve access to health care in the Commonwealth by supporting programs that assure an optimal supply and distribution of primary care and other health professionals. The Center is supported by the Health Workforce Transformation Fund through an Inter-State-Agreement with the Executive Office of Labor and Workforce Development. The Center is also supported by grant funding from the federal Health Resources and Services Administration (HRSA). The Center strives to fulfill its mandate and to further the goals of Chapter 224 by focusing its work in three areas:

- Collection and analysis of data on the Commonwealth's primary care workforce (e.g., physicians, advanced practice nurses, physician assistants, dentists, and mental health professionals) to support development of targeted strategies for addressing workforce gaps;
- Administration of federal and state programs that encourage recruitment and retention of primary care providers; and
- Coordination of DPH health care workforce activities with those of other public and private primary care workforce development efforts.

Health Care Workforce Data Collection

The *Health Professions Data Series* was developed in 2009 following a mandate to monitor the composition and distribution of health care providers and to identify solutions to address potential workforce shortages. A core dataset was developed to monitor workforce trends in seven licensed provider disciplines: physicians, physician assistants, nurses, licensed practical nurses, dentists, dental hygienists and pharmacists. The core dataset contains provider specialty, licensing, education and education status, languages, employment characteristics, (e.g., location, practice type, provider role, planned work hours), special needs training, and proportion of patients with special needs. Periodic reporting from the dataset helps identify current and emerging issues in the supply and distribution of the health care workforce. The first physician data report is schedule for posting in 2016.

The data series is used to enhance our understanding of the distribution of primary health care services which helps inform policy and program development for other DPH initiatives such as the Massachusetts Loan Repayment Program and the State's Oral Health Equity Project. The Data Series is also used to provide accreditation documentation to the Department's application to the Public Health Accreditation Bureau.

The ongoing collection of health care workforce data is essential to fulfilling the Center's mission of improving access to care, particularly in our changing health care environment. The *Health Professions Data Series* is also proving to be a valuable resource to other state agencies as well as organizations outside of state government. As the data collection expands to other health provider types, the work will reach an even broader audience and provide a solid evidence base for the planning, resourcing, and implementation of the reforms called for in Chapter 224 relating to health care quality, cost effectiveness, and access. To access published health professions data series reports, please visit:
http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/health care-workforce-center/health-care-workforce-development-reports.html

Administration of Federal and State Programs

The Center plays a critical role in primary care recruitment and retention by implementing and promoting the following federal and state programs:

- Massachusetts Loan Repayment Program for Health Professionals
- J-1 Visa Waiver Program

Massachusetts Loan Repayment Program for Health Professionals (MLRP)

The primary recruitment and retention initiative of the Center is the Massachusetts Loan Repayment Program (MLRP). The MLRP supports employment of primary care health professionals in shortage areas through funding that reduces outstanding health professional education loans. The MLRP currently consists of two components:

- *Component A* is funded by a grant from the federal Health Resource and Services Administration (HRSA) that requires a dollar-for-dollar non-federal match. This federal funding also requires that awardees practice in a federally designated Health Professional Shortage Area (HPSA). The total grant award is $550,000 annually through 2019.
- *Component C* is primarily funded by the Health Workforce Transformation Fund (see below) established by Chapter 224 of the Acts of 2012, which mandates an Inter-State Agreement between the Executive Office of Labor and Workforce Development and the Department. A secondary source of state funding for this component; line item 4510-0715 was eliminated in a 9c reduction in FY15. This reduction eliminated $157,000 allocated for loan repayment. Eligibility criteria for Component C are more flexible, allowing the Center to respond to specific state needs.

MLRP Eligibility

In order to be eligible to apply for the MLRP, applicants must have an employment commitment from an eligible employer (i.e. a public or non-profit entity) providing services in a geographic area or community that is identified as high need. Participants agree to provide the equivalent of two years of professional health services in clinical practice for that employer. A reduced-hour schedule is permitted, and the length of service is increased commensurate with the reduction in hours/week. Awards vary by profession. Physicians, Psychologists (PhD.), and Nurse Practitioners are eligible for a total award of up to $50,000 over two years (up to $25,000 per year). All other qualified health professionals are eligible for a total award of up to $40,000 over two years (up to $20,000 per year). In the event of a breach of contract, the MLRP can recoup all loan repayment funds provided to the individual, with penalty.

Resources for the MLRP are limited and the demand is high. Each year, the Department receives applications from two-to-three times as many applicants as the Center has funding for. To date the Center has worked to "triage" applicants to the opportunity that is most likely to meet individual needs, including referring applicants to other federally-administered and privately-funded opportunities. The last MLRP application cycle began on March 1, 2015 and closed in July 2015. Applications were reviewed by a committee which included individuals with expertise in epidemiology, substance abuse, behavioral health, youth health, reproductive health, rural health, oral health, and representation from the Massachusetts League of Community Health Centers (the League); the state's federally designated Primary Care Association.

Due to the 9C budget reductions initiated in SFY 2015, the award amounts were reduced across all awardees, making the highest award amount $40,000 for a two-year contract. In this application cycle the program received 133 applications and made 47 awards to health professionals through both program components.

Chapter 224 of the Acts of 2012 established the Health Care Workforce Transformation Fund, administered by the Executive Office of Labor and Workforce Development, and mandated that 20% ($4,000,000 over a four-year period) of the fund be transferred to the Department to support the work of the Center including the MLRP and its data collection activities. In order to expand the reach of these resources, the Department entered into a contract with the League for a complementary loan repayment program focused on eligible primary care physicians, physician assistants, and nurse practitioners in community health centers, and for other activities. The League receives $500,000 per year over four years. The remaining $2,000,000 is retained by the Department to support the MLRP and the Center. The Transformation Fund continues through state fiscal year 2017. Information on current MLRP participants, a description of the most recent MLRP awards and funding sources is presented in the appendix.

Related Evaluation and Retention Activities

The MLRP effectively functions as an investment in the state's primary care infrastructure. To ensure that the "return" on that investment extends beyond the two-year service requirement, the Center has devoted considerable attention to evaluating the MLRP – both with respect to participants' experience with the application process and, at the completion of their service term, their experience with their placement.

The Center employed *Welcome Surveys*, *Exit Surveys* and key informant interviews (i.e., health professionals and site administrators) to improve MLRP administration and to identify ways to increase participant satisfaction and retention rates. The Center's recruitment and retention findings are consistent with national trends. The process identified several low-cost high-impact tools and incentives that can be used to further support program goals. These included engaging participants in research, training, mentoring, or other activities that support clinician growth and development. Data showed that sites in high need areas may need additional support in their health workforce development including substantive worksite orientation. Despite the value of site-specific recruitment and retention plans, most provider sites do not have such plans in place. Survey data also showed that hospital affiliation increased the recruitment and retention capacity of community based agencies. However community-based agencies find it difficult to compete with neighboring hospitals' salaries and benefits packages. Ultimately, survey data show that access to loan repayment adds significant value as a recruitment and retention tool.

Welcome Packet

A *Welcome Packet* was developed for MLRP awardees, with relevant program information and a welcome-survey to obtain feedback on Center performance in the application process and gather information aimed at helping practice sites orient their MLRP participants.

Welcome Survey highlights:

- Over 97% of participants indicated they planned to continue practicing at their site beyond their MLRP commitment.
- The top four factors that were important to participants in choosing their work site were:
    - Working with underserved populations;
    - Opportunities for professional growth;
    - Site's reputation;
    - Site's qualification for the MLRP.
- The majority of participants were provided an orientation by their work site that they considered helpful to their effectiveness in their roles.
- The majority of participants found the MLRP application process – including responsiveness of Center staff – to be good or excellent.

It is interesting to note that neither the salary nor the benefit package was identified as a top determinant for practicing at the site.

Exit Survey

Since 2009 the Center has conducted an exit survey prior to MLRP participants completing their term of service.

Exit Survey Highlights:

- More than eighty percent of survey respondents indicated that they planned to continue working at the practice site of service.
- The top four sources of satisfaction with other aspects of their site experience were:
    - Mission and goals of the site;
    - Relationship with colleagues;
    - Site's reputation in the local community;
    - Malpractice coverage.
- The majority of participants decided to work with underserved populations when they were in their health professional training program.

The overall finding from both the welcome and the exit surveys is that MLRP participants have both an initial and ongoing commitment to working with underserved populations, and the financial support they receive from the MLRP makes it possible for them to pursue those practice goals. Research also indicates that while the loan repayment program is an essential tool, other initiatives are also important to maintain long-term retention beyond a 5-year period. In addition to the welcome and exit surveys, the Center staff are exploring ways to implement post-participation follow-up strategies to track over time health professionals' practice in a high need area after their loan repayment contract obligation is met.

J-1 Visa Waiver Program

Another important resource for primary care capacity-building in underserved areas is the J-1/Conrad-30 Physician Visa Waiver program. J-1 visas are non-immigrant visas issued by the United States to visitors participating in programs that promote cultural exchange, with a particular focus on individuals who want to obtain medical or business training within the U.S. For example, J-1 visa waivers are available to physicians who agree to practice in federally designated shortage areas for a 3-year period. Common designated sites include community health centers and correctional facilities.

J-1 Visa Totals - 2015

In 2015 the Center supported 29 applications for physicians to practice in Massachusetts. Currently the program counts 84 physicians obligated and practicing in areas of greatest need

Related Evaluation and Retention Activities

In January 2015 the Center launched exit surveys for J-1 Visa Waiver Program (J-1) participants who have either left, or will be leaving the program. In January 2015, 24 J-1 participants completing their 3-year commitment were emailed the survey.

Exit Survey Results - Preliminary (N=21, 88%)

- Most respondents planned to continue practicing in a federally designated HPSA or Medically Underserved Area or Population (MUA/MUP) after their 3-year commitment.
- The decision to apply for visa waiver was primarily influenced by the wish to remain in the U.S., opportunity to provide health care in underserved areas, and the need to streamline their visa process.
- Most participants said they would recommend the J-1 program to others.
- Most participants had prior professional experience with medically underserved populations.
- Principal reasons for leaving their site included family needs, professional opportunities, and salary/benefits.

Coordinating Primary Care Workforce Development Activities

A key Center mandate is to coordinate public and private health care workforce activities with those of the Department. The Center is pleased to report the following:

- The Center is to be advised by a 19 member Health care Workforce Advisory Council appointed by the Governor. The Council consists of representatives of various disciplines and affiliations, as mandated in the legislation, each serving a three-year term, and designed to give wide ranging and detailed perspectives in regards to issues facing health care workforce development and retention. While several member slots remain unfilled, a quorum has been established. The Council will formally meeting in 2016.
- The Center is represented on the Health Workforce Transformation Fund Advisory Board. The Director of the Division of Health Access represents the DPH Commissioner on this Board and the Center Director provides program-support.
- The Center Director participates on the University of Massachusetts Medical School, Learning Contract Advisory Group.
- The Center continues monthly meetings with the Commonwealth Corporation which represents the Executive Office of Labor and Workforce Development, and includes the Massachusetts Area Health Education Center (MassAHEC) and others. Each of the entities represents a unique perspective of health care workforce.
- The Center collaborates with the MassAHEC and the Mass League of Community Health Centers on several initiatives relating to health centers and rural health care. The work includes health workforce assessment and development and information sharing on various partner initiatives including the Rural Scholars program. Center staff supported and informed a baseline data collection process to begin to evaluate program impact on the number of physicians and nurse practitioners practicing in rural areas. These activities help the Center shape workforce initiatives and improve recruitment and retention of health professionals.
- The Center was a key contributor to the efforts by the Rural Access Commission, established by Section 203 of the FY13 GAA. The recommendations of the Commission report include the development of an enhanced infrastructure to identify and address rural workforce needs and implementation of evidenced-based strategies to address health care worker shortages in rural communities.
- The Center worked closely with the State Office of Rural health on health care workforce assessment and distribution regarding the needs in North Berkshire County, responding to the abrupt closure of the North Adams Hospital. Activities continue in order to improve health care access in this area.

Next Steps

- Continue efforts with the Division of Professional Licensure to gather data on additional health workforce disciplines including behavioral health, allied health, and others.
- Continue work with the DPH Bureau of Substance Abuse Services (BSAS) on those substance use providers licensed through BSAS.
- Refine Massachusetts-specific high need or shortage designation criteria.
- Complete the needs assessment and develop a report that includes recommendations for identifying areas in Massachusetts that have significant primary health care access needs. This will refine and update the current Massachusetts specific criteria used for the MLRP.

Conclusion

Massachusetts is nationally recognized for its robust, high-performing primary care workforce and for its extraordinary health care access, services and strong health outcomes. The capacity to collect and monitor health professions workforce data and support workforce development is critical to ensuring that the health care needs of Massachusetts residents are adequately addressed. The Health Care Workforce Center continues to diligently support a strong health care workforce that provides highly accessible quality care to Massachusetts residents.

Appendix

Massachusetts Loan Repayment Program for Health Professionals: State Fiscal Year 2016 Overview of Funding and Awards

Funding Sources

Component A:

$550,000	4500-1069 Federal Grant through Health Resources Services Administration
$350,000	4510-0110 State
$150,000	7003-1224 *Health Workforce Transformation Fund
$50,000	Memorandum of Agreement with The League using contracted HW-Transformation Fund dollars
$1,100,000	Subtotal available for Component A awards

Component C

$311,000	Health Workforce Transformation Fund for the FY2016 awardees

Award Amount

The MLRP continued a reduced maximum award amount of $40,000.00 versus $50,000 maximum. This amount is in keeping with the reductions in response to the 9C reductions fiscal year 2015 when the state account 4510-0715 was reduced to $0. The 4510-0715 was not in the budget this fiscal year. This reduced award amount also allows more health professionals for an award with the resulting commitment to practice in a high need community.

Below is maximum award amount breakdown by discipline or profession:

- MDs, DDs, PAs, NPs, CNMs $40,000.00
- HSPs $30,000.00
- LICSWs, LMHCs, RNs $25,000.00
- PharmD, LADC1, DH $20,000.00

The table below shows the profession, the number of awards per profession, and the number of applications per profession.

Profession	Number of Awards
Certified Nurse Midwife	2
Dentist	3
Dental Hygienist	1
Health Service Psychologist	2
Licensed Clinical Social Worker	11
Mental Health Counselor	5
Nurse Practitioner	10
Physician Assistant	4
Clinical Pharmacist	0
Physician – DO	3
Physician – MD	2
Registered Nurse	2
Licensed Alcohol and Drug Counselor	1
TOTAL	46